



# Model #: SU2200XLNAFTA

#### SmartOnline Expandable Tower UPS System - NAFTA assembled version of SU2200XLa



### **Highlights**

- 2200VA / 2.2kVA on-line, double-conversion, extended-run tower UPS
- Maintains sine-wave 110/120V +/-2% output during overvoltages to 138 and brownouts as low as 65V (50/60Hz auto-sensing)
- Simultaneous communications via HID compliant USB port, serial port, SNMP/Web card slot and EPO interface
- Fault tolerant auto-bypass mode, current monitoring and switched PDU control via 2 switchable output load banks
- Input: NEMA 5-20P (120V, optional 5-15P included) / Output: 6 NEMA 5-15/20R and 1 NEMA L5-20R (120V)
- \$250,000 Ultimate Lifetime Insurance (USA and Canada Only)

## **Description**

2200VA on-line, double-conversion UPS system for critical server, network and telecommunications equipment. Upright tower form factor. Expandable battery runtime with optional BP48V60-3UNAFTA external battery packs. Full-time sine wave 110 or 120V +/-2% output. Online, double-conversion Uninterruptible Power Supply (UPS) actively converts raw incoming AC power to DC, then re-converts output back to completely regulated, filtered AC output. Operates continuously without using battery power during brownouts to 65V and overvoltages to 138V. NEMA 5-20P input plug (optional 5-15P inlcuded); NEMA 5-15/20R and NEMA L5-20R output receptacles. Network-grade AC surge and noise suppression. Zero transfer time between AC and battery operation. Network management interfaces support simultaneous communications via USB port, DB9 serial port and SNMPWEBCARD slot. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. Integrated 2-bank PDU switching supports load shedding and remote-reboot of connected equipment. 3-stage metered current monitoring and battery charge status LEDs. Dataline surge suppression for dialup, DSL or network Ethernet connection. Utility power and voltage regulation LEDs. Audible alarm. Self-test. Fault-tolerant auto-bypass mode. Field-replaceable, hot-swappable internal batteries and external battery packs. Attractive all-black color scheme. \$250,000connected equipment insurance;

#### Package Includes

- SU2200XLNAFTA UPS System
- PowerAlert Software and cabling
- Instruction manual with warranty information

## **Features**

- SmartOnline high performance UPS system is ideal for critical voice, data, medical and industrial network applications
- True on-line, double-conversion UPS provides perfectly regulated sine wave output within 2% of 110/120V (user selectable) under all usage
- · Maintains continuous operation through blackouts, voltage fluctuations and surges with zero transfer time
- Removes harmonic distortion, fast electrical impulses, frequency variations and other hard to solve power problems not addressed by other
- Corrects line voltage conditions as low as 65V and as high as 138V back to selectable 110/120V (+/-2%) values

- Standard internal battery set offers 14 minutes runtime at half load (800W) and 4.5 minutes at full load (1600W)
- Optional BP48V60-3UNAFTA external battery packs offer expandable battery runtime
- Space saving upright tower format
- Fault tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS suffers internal failure and requires maintenance
- Network interfaces support simultaneous communications via built-in USB, DB9 serial and SNMPWEBCARD slot
- HID compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, plus any number of additional servers over IP
- UPS interface supports on-battery, low-battery, power-restored, AC-voltage, DC-voltage, output current monitoring, battery charge current, battery capacity, AC line frequency, timed inverter shutoff, activate self-test, load bank output power control and remote reboot, UPS nominal voltage adjustment and UPS line to battery power voltage setpoints
- Built-in Emergency Power Off (EPO) interface with cable
- NEMA 5-20P input plug (user-installable NEMA 5-15P replacement plug included)/NEMA 5-15/20R & NEMA L5-20R output receptacles
- Integrated 2 bank switched PDU enables remote outlet management for load shedding or remote reboot of individual load banks
- Front panel LEDs offer current monitoring and battery charge level information
- UPS ships fully assembled in full compliance with DOT regulations, no time consuming connection of internal batteries by user required
- Single line TEL/DSL or network ethernet line surge suppression
- \$250,000 Ultimate Lifetime Insurance

## **Specifications**

OUTPUT	
Output Volt Amp Capacity (VA)	2200
Output kVA capacity (kVA)	2.2
Output Watt Capacity (watts)	1600
Output kW capacity	1.6
Output power factor	0.7
Crest Factor	3:1
Nominal Output Voltage(s) Supported	110V; 120V
Nominal Voltage details	120V default
Frequency compatibility	50 / 60 Hz
Frequency compatibility details	Output frequency matches input nominal on startup, defaults to 60 Hz on cold-start
Output voltage regulation (line mode)	+/- 2%
Output voltage regulation (Economy line mode)	+/- 10%
Output voltage regulation (Battery mode)	+/- 2%
Built-in UPS output receptacles	6 5-15/20R outlet(s); 1 L5-20R outlet(s)
Built-in controllable switched load banks	Two switchable three-outlet 5-15/20R load banks

Basic PDU options	PDUNV (1U / 2 C19, 12 C13 outlets); PDU40TDUAL (0U / 40 5-15/20R outlets)	
Metered PDU options	PDUMH20 (1U / 13 5-15/20R outlets); PDUMH20AT (1U / 16 5-15/20R outlets)*; PDUMV20 (0U / 16 5-15/20R outlets); PDUMV40 (0U / 32 5-15/20R outlets)	
Switched PDU options	PDUMH20ATNET (1U / 16 5-15/20R outlets)*; PDUMV20NET (0U / 24 5-15/20R outlets)	
External PDU redundancy options	*ATS switch options PDUMH20AT & PDUMH20ATNET support dual UPS and hot-swappable UPS configurations	
Output AC waveform (AC mode)	Sine wave	
Output AC waveform (battery mode)	Pure Sine wave	
INPUT		
Rated input current (at maximum load)	16A (120V), 17.6A (110V)	
Nominal Input Voltage(s) Supported	110V AC; 120V AC	
UPS input connection type	5-20P	
UPS input connection description	Includes user-installable 5-15P replacement plug	
Input circuit breaker	30A	
UPS Input cord length (ft.)	10	
UPS Input cord length (m)	3	
Recommended Electrical Service	20A 120V	
BATTERY		
Full load runtime (minutes)	4.5 min. (1600w)	
Half load runtime (minutes)	14 min. (800w)	
Expandable battery runtime	Extended runtime supported via optional external battery packs	
External battery pack compatibility	BP48V24-2U (limit 1); BP48V60RT-3U (multi-pack compatible); BP48V60-3UNAFTA (multi-pack compatible)	
DC system voltage (VDC)	48	
Battery recharge rate (included batteries)	Less than 5 hours from 10% to 90%	
Replacement battery cartridge (internal UPS battery replacement)	RBC48-SUTWR	
Battery Access	Battery access door	
Battery replacement	Hot-swappable, user replaceable batteries	

Voltage regulation description	Online, double-conversion power conditioning
Overvoltage correction	2% output voltage regulation during overvoltages to 138
Undervoltage correction	2% output voltage regulation during undervoltages to 80
Severe undervoltage correction	2% output voltage regulation during undervoltages to 65 (under 70% load only)
LEDS ALARMS & SWITC	HES
LED Indicators	14 LEDs indicate line power, online mode, economy/bypass mode, on-battery, overload, battery low, replace battery and fault status information - includes 4-LED meter display for load and battery charge level
Alarms	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions
Alarm cancel operation	Power-fail alarm can be silenced using alarm-cancel switch
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation
SURGE / NOISE SUPPRE	ESSION
UPS AC suppression joule rating	570
UPS AC suppression response time	Instantaneous
UPS Dataline suppression	1 line TEL/DSL (1 in / 1 out); 10/100Base T Ethernet
EMI / RFI AC noise suppression	Yes
PHYSICAL	
Installation form factors supported with included accessories	Tower
Primary form factor	Tower
UPS / Power Module dimensions in primary form factor (height x width x depth / inches)	10.2 x 9 x 19.5
UPS / Power Module dimensions in primary form factor (height x width x depth / cm)	26 x 22.9 x 49.5
UPS / Power Module weight (lbs)	53.4
UPS / Power Module weight (kg)	24.2
UPS Shipping dimensions (height x width x depth / inches)	15.2 x 13 x 24
UPS Shipping dimensions (height x width x depth / cm)	38.7 x 33 x 61
Shipping weight (lbs)	58.6
Shipping weight (kg)	26.6

UPS housing material	Steel		
Cooling method	Fan		
ENVIRONMENTAL			
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius		
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius		
Relative Humidity	0 to 95%, non-condensing		
AC mode BTU / hr. (full load)	812.9		
AC economy mode BTU / hr. (full load)	347.2		
Battery mode BTU / hr. (full load)	885.6		
AC economy mode efficiency rating (100% load)	94%		
Audible Noise	< 45 dB at front side 1m		
COMMUNICATIONS			
Communications interface	DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface		
Network monitoring port description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications		
PowerAlert software	Included		
Communications cable	DB9 cabling included		
WatchDog compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications		
LINE / BATTERY TRANS	FER		
Transfer time	No transfer time (0 ms.) in online, double-conversion mode		
Low voltage transfer to battery power (setpoint)	80V (100% load), 65V (		
High voltage transfer to battery power (setpoint)	138		
SPECIAL FEATURES			
Cold Start (startup in battery mode during a power failure)	Cold-start operation supported		
High availability UPS features	Automatic inverter bypass; Hot swappable batteries		
Green & high efficiency features	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of econom mode operation		
CERTIFICATIONS			
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI); Meets FCC Part 68 / Industrie Canada (telecommunications); ROHS (Restriction of Hazardous Substances)		

WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance

#### **Related Items**

## **Optional Products**

Related Model	Description	Qty.
AS400CABLE KIT	Power Management Tools - UPS Communication Cable Kit for System i / AS400 / iSeries Servers	1
BP48V24-2U	BP48V242U - External Battery Pack for UPS System	1
BP48V60RT-3U	External Battery Pack and Cable. 3U, Expandable, Blue 2-Point Connector	1
CT120	Instant-Read- AC Outlet Circuit Tester	1
DCATV	Network Surge Suppressor - Essential protection for TV/VCR coaxial lines	1
DNET1	Network Surge Suppressor - Essential protection for data and communication lines	1
DTEL2	Network Surge Suppressor - Essential protection for data and communication lines	1
ENVIROSENSE	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	1
SNMPWEBCARD	For remote monitoring and control via SNMP, Web, or Telnet.	1
MODBUSCARD	For remote monitoring and control via MODBUS protocol	1

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/en/products/model.cfm?variables.txtModelID=3543.

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